

7/pch

10/551381

JC12 Rec'd PCT/PTC 29 SEP 2005

TOOTHBRUSH

FIELD OF THE INVENTION

5 The present invention relates to a brush for cleaning of teeth within the mouth.

BACKGROUND OF THE INVENTION

A toothbrush in daily use is usually stored on a predetermined position in the storage cabinet of a washing stand.

10 However, there is a problem that when the toothbrush after use is stored, the adhered water of the toothbrush drips in the storage cabinet, where the water collects and results in unsanitary surroundings.

15 Accordingly, the object of the present invention is to provide a toothbrush that is not particular about a storage position and that is good in draining of the water.

SUMMARY OF THE INVENTION

20 The foregoing object is accomplished in a toothbrush of claim 1 of the present invention, which comprises a head, a neck and a handle continuously formed in turn, wherein the handle is provided with a sucker portion.

25 According to claim 1, the toothbrush can be retained through the sucker portion on a desired position in the washing stand or the washbasin. That is, this toothbrush is not particular about a storing place and needs not a shelf or a cup for storing itself. Besides, this toothbrush can be retained on every place by just pushing the sucker portion, so that it can be handled easily. Further, it is possible to drain the toothbrush well and
30 to keep it clean as it is retained.

In a toothbrush of claim 2 of the present invention, the sucker is coaxially formed on the tip end of the handle opposite to the head, and the end of the sucker portion is formed to be open as a bell mouth.

5 According to claim 2, the sucker portion is disposed on the opposite side of the handle to the head with bristles, so that a user can store the toothbrush well without touching the head with his hand. Namely, the user may only push the sucker to a part of a washing stand to stick it there.

10 Further, in a toothbrush of claim 3 of the present invention, the handle is provided integrally with an elastic material portion and the sucker portion is made of the same material as the elastic material portion and formed continuously with it.

15 According to claim 3, the sucker portion can be made of a soft material different from the head, neck and handle, which are made of hard materials, and well integrated with the handle. Further, the toothbrush can be enhanced in the property of its design.

20 Other advantageous features of the invention will be obvious after a reading of the following detailed description of the preferred embodiment shown in the drawings as follows.

BRIEF DESCRIPTION OF THE DRAWINGS

25 FIG.1 is a side view of a toothbrush, as a first embodiment according to the present invention;

FIG.2 is a front view of the toothbrush in FIG.1;

FIG.3 is a rear view of the toothbrush in FIG.1;

FIG.4 is a perspective view of the toothbrush in FIG.1,
horizontally retained through a sucker portion;

FIG.5 is a side view of a toothbrush, as a second embodiment
according to the present invention;

5 FIG.6 is a front view of the toothbrush in FIG.5; and

FIG.7 is a rear view of the toothbrush in FIG.5.

DESCRIPTION OF THE PREFERRED EMBODIMENT

10 Hereinafter, an embodiment of the present invention will be
described with reference to the drawings.

FIG.1 to 4 of the drawings illustrates the first embodiment of
the present invention. Referring now to FIG.1 to 3, a toothbrush
1 is composed of a head 2, neck 3 and handle 4 continuously
formed in turn. On the lower end of the handle 4 is formed a
15 sucker portion 5. The head 2, neck 3 and handle 4 are made of
hard materials.

The slightly forward-bent head 2 is provided with bristles
6. The neck 3 is gradually bent forward from the lower end of
the head 2 to be formed slanting downward. The handle 4 is
20 formed increasing its diameter so as to draw the curved contours
of its longitudinal cross section, the lower portion of which is
formed gradually reducing its diameter to reach to the sucker
portion 5. On the tip end of the handle 4 is coaxially formed
the sucker portion 5, the end of which is open as a bell mouth.
25 On the rear surface of the handle 4 is integrally stuck an
elastic material portion 8. The sucker portion 5 is made of the
same soft material, rubber, for example, as the elastic material
portion 8 and formed continuously with it.

The elastic material portion 8 is provided with four cleats 8a, 8a, 8a, 8a for preventing slipping at regular intervals axially, which are projected from the rear surface of the portion 8 extending laterally. When holding the handle 4, four fingers except the thumb are capable of well preventing slipping on the elastic material portion 8 due to those cleats 8a, 8a, 8a, 8a.

On the surface of the handle 4 opposite to the elastic material portion 8 and adjacent to the neck 3 is provided a thumb pad portion 7 in the shape of an ellipse with the long axis parallel to the handle axis. To this thumb pad portion 7 is stuck a member having a plurality of soft pleats 7a, 7a, 7a at regular intervals axially. When laying the thumb on the tips of those pleats, the pleats 7a, 7a, 7a are deformed respectively, so that it is possible to lay the thumb on the thumb pad portion 7 with a soft touch.

Since the sucker portion 5, thumb pad portion 7 and elastic material portion 8 are made of elastic materials, it is possible to enhance the property of a general design of the toothbrush 1 by making the sucker portion 5, thumb pad portion 7 and elastic material portion 8 in a color different from that of the head 2, neck 3 and handle 4.

Since the toothbrush 1 of the present embodiment is provided with the sucker portion 5 on the tip end of the handle 4, it becomes possible to push the sucker portion 5 to a wall surface or the like to retain the toothbrush 1 in a horizontal condition as shown in FIG.4, for example.

Referring to FIG.4, there is shown a washing stand 10, on the lower portion of which is provided a washbasin 11. On the

upper portion of the washbasin 11 is provided a faucet 12. Standing from the washbasin 11, there is vertically provided a cabinet board 13 constructing the washing stand 10. To the cabinet board 13 is attached a storage cabinet 14, on the front surface of which is provided a mirror 15.

It becomes possible to push the sucker portion 5 to the cabinet board 13 above the washbasin 11, for example, of the washing stand 10 to retain the toothbrush 1 in a horizontal condition. Since the bristles 6 of the toothbrush 1 can be retained above the washbasin 11, the adhered water of the bristles 6 drips well into the washbasin 11 in a sanitary condition. Besides, the bristles 6 of the toothbrush 1 can be well dried to be kept clean.

Also, the toothbrush 1 can be retained in a horizontal condition through the sucker portion 5 on the front surface of the mirror 15. Further, the toothbrush 1 can be retained and stored in a vertical condition on a corner of the washbasin 11 through the sucker portion 5 stuck to the upper surface of the washbasin 11. In short, the toothbrush 1 is not particular about the storage position and needs not a shelf or a cup for storing itself. This toothbrush 1 can be well stored through the sucker portion 5 to be stuck to a desired place of a washing stand. Besides, the toothbrush 1 is good in draining of the water to be kept clean.

Next, a toothbrush 1 as another embodiment is shown in FIG.5 to 7. In this embodiment, a thumb pad portion 7 is provided with pleats 7a, 7a, 7a arranged axially and surrounding the whole periphery thereof like threads of a male screw. The upper end of

the elastic material portion 8 is disposed adjacent to this thumb pad portion 7. Besides, the elastic material portion 8 is provided continuously with a front portion 8b arranged in the front side of the handle 4 as shown in FIG.5 and 6.

5 In this embodiment, since a sucker portion 5 is also formed on the tip end of the handle 4, it becomes possible to push the sucker portion 5 to a wall surface or the like to retain the toothbrush 1 in a horizontal condition.